

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/772,762	01/30/2001	Tetsuya Makino	1100.65170 9437 EXAMINER	
24978 75	90 01/06/2005			
GREER, BURNS & CRAIN			WU, XIAO MIN	
300 S WACKER DR 25TH FLOOR CHICAGO, IL 60606			ART UNIT	PAPER NUMBER
			2674	TALER NOMBER
omondo, ib	0000		DATE MAILED: 01/06/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

·	Application No.	Applicant(s)				
Office Action Comments	09/772,762	MAKINO ET AL.				
Office Action Summary	Examiner	Art Unit				
	XIAO M. WU	2674				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be ti ly within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS fron e, cause the application to become ABANDON!	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 12.4	April 2004					
	· <del>· · · · ·</del>					
3) Since this application is in condition for allowa	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 11-14 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 11 and 13 is/are rejected. 7) ☐ Claim(s) 12 and 14 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119	•					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17:2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)						
Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2)	Paper No(s)/Mail Di 5)	ate Patent Application (PTO-152)				

Application/Control Number: 09/772,762 Page 2

Art Unit: 2674

#### **DETAILED ACTION**

### Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn as indicated in the previous advisory office action.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al. (US Patent No. 4,380,008) in view of Miyazawa (US Patent No. 5,731,794).

As to claims 11, 13, Kawakami discloses a liquid crystal display device comprising: an matrix panel; a liquid crystal having spontaneous polarization, sealed in the matrix panel; and a writing/erasing unit (Fig. 12) for displaying an image on a frame by frame basis by repeating a

Application/Control Number: 09/772,762

Art Unit: 2674

Page 3

data writing processing (e.g. selected state, half-selected selected as shown in Fig. 9) and a data erasing process (e.g. erasing state as shown in Fig. 9) for the matrix panel; wherein one frame time comprises a period of the data writing process, a period of the data erasing process and a period during which neither the data writing process nor the data erasing process is performed (e.g. the non-selected state as shown in Fig. 9).

It is noted that Kawakami does not disclose that the liquid crystal display is an active matrix type display. However, it is well known in the art that the liquid crystal display could be an active matrix display (e.g. each display element is controlled by a TFT switch) such as taught by Miyazawa (see Fig. 11). It would have been obvious to one of ordinary skill in the art to have modified Kawakami with the features of the active matrix display as taught by Miyazawa because the matrix type LCD and the active matrix type LCD are alternative for each other.

# Allowable Subject Matter

5. Claims 12 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

## Response to Arguments

6. Applicant's arguments with respect to claims 11 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2674

#### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US Patents 4,212,010, 5,353,041, 5,412,397, 5,559,616 are cited to teach a LCD display device.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiao Wu whose telephone number is (703) 305-4721.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached on (703) 305-4709.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377

XW

January 3, 2005

XIAO WU PRIMARY EXAMINER ART UNIT 2674

Page 4